

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: Michael Crestohl <mc@shore.net>
Subject: A few interesting military training manuals for sale.....
Message-ID: <199606251229.IAA04630@northshore.shore.net>

Gang:

I found a couple more interesting manuals while clearing out the cellar in preparation for my upcoming move (oh, my aching back! I'm getting too old for this!)

1. Air Force On-The-Job training manual - AIRBORNE RADIO OPERATOR \$15.00
October 1958. Includes operating instructions for ART-13 and BC-348 and other neat goodies.
2. U.S.Army Air Defense School - Signal Communications for Army \$10.00
Defense Units March 1960 -
3. U.S. NAVY SPECIAL DEVICES GUIDE NAVEXOS P-530-2 July 1956 \$20.00
Mostly training aids and devices, very interesting manual from the Office of Naval Research, Special Devices Center.

If interested please reply by e-mail. Postage is extra.

73,

Michael Crestohl, KH6KD/W1
mc@shore.net

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: wt465@freenet.victoria.bc.ca
Subject: CATALOGS FOR SALE
Message-ID: <01I6BFW7NIZM8ZV792@KUHUB.CC.UKANS.EDU>

I have the following radio / electronic catalogs available.

All prices are plus postage.

Bill Worthington, AA4FM/0
1420 Ash Court
Eudora KS 66025

* LAFAYETTE RADIO ELECTRONICS
1961 - catalog #610

MINT condition - includes original order form and envelope
(still attached to binding!)
\$18 or best offer

* HEATHKIT CATALOG
1954
MINT condition - includes all original order blanks
at front and rear of catalog (still attached to binding!).
\$20 or best offer

----- END -----

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: Lynn Stolz <lstolz@tekelec.com>
Subject: CyberTrunkSale
Message-ID: <31D0339A.6201DD56@tekelec.com>

Folks,

The following vintage Ham Shack accoutrements will be "hamfested out"
of my shack unless anyone on the list wants first choice. Everything
is in good working condition and clean. I'm asking an additional
amount to cover packing and share some of the shipping costs.
For multiple items that can be packaged in the same box, I'll knock \$2
off each additional item.

Ameco CPS-WL Code Practice Oscillator - Grey Hammertone 50C5 35W4	\$15
Astatic D-104 Mic w/ UG8 stand	30
Calrad Dual-Meter SWR Bridge - model 65-287 rated 3-150 MHz	20
Dow-Key DK-60 120VAC Coax Rly w/ DPDT external contacts	25
Dow-Key DK78-6 6 Position Coax Switch	45
Electro-Voice 638 Hi-Z Dynamic Mic & Stand	45
Heathkit HD-20 Crystal Calibrator	20
Heathkit PM-2 Mobile Tuning Meter	20
MARS SW-10 SWR Bridge 52/72 ohm switchable	20
Military AN/PRM-10 Test Oscillator (GDO) incl. manual copy	100*
Raytrack AL-2CG Autolevel Speech Compressor	25
Shure CR84S "Controlled Reluctance" Microphone	25

Please add \$5 extra for shipping except the PRM-10 (it's heavy).
*PRM-10 please add \$10 extra.

73,
Lynn, N8AJ - lstolz@tekelec.com

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: Michael Crestohl <mc@shore.net>
Subject: FS: NAVSHIPS 0967-971-0010 RADIO SET AN/WRC-1 Manual
Message-ID: <199606251230.IAA04856@northshore.shore.net>

Gang:

Another goodie just surfaced!

NAVSHIPS 0967-971-0010 Volume 1 Technical manual for RADIO SET AN/WRC-1
This consists of the R-1051 receiver, T-827/URT transmitter, AM-3007/URT
amplifier and CU-937/UR coupler. January 1970. Book is about 3" thick!
Anyone got one of these sets? \$35.00 plus postage.....

If interested please reply by e-mail..

73,

Michael Crestohl, KH6KD/W1
mc@shore.net

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: G0-9 parts
Message-ID: <9606251619.AA100693@csemail.cropsci.ncsu.edu>

>
> Does anyone out there have a junker Navy G0-9, or parts from one?
>
> William Donzelli
> integrat@usr.com
>

I don't have any spares handy but.....

The G0 is the same as the TBW and the same as the TDE, in the essential
parts and circuitry. The G0 was the all-in-one aircraft version.
The TBW was the split into separates cases portable version. The TDE
was the ship/shore version.

Bob/NA4G

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: "James C. Garland" <garland@MPS.OHIO-STATE.EDU>
Subject: Goodbye for awhile
Message-ID: <01I6BWPJ4WCA8WWC7E@MPS.OHIO-STATE.EDU>

Hi Guys,

I'm unsubscribing for a couple of months, pending a change to a new QTH.
I've packed up my shack and workshop, filling 95 packing boxes -- many of
them too heavy to lift by myself! My XYL thinks I'm crazy to haul all this
stuff to my new QTH. They don't call them boatanchors for nothing!

CUL,

Jim W8ZR

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: pmills@cyberhouse.com (Phil Mills)
Subject: Heath IM-28 VTVM info needed
Message-ID: <199606251445.JAA29011@ns.cyberhouse.com>

I would like to buy a copy of the schematic and alignment info for
a Heath IM-28 VTVM....can anyone help with this?

thanks,
Phil
Phil Mills, AB5TH
pmills@cyberhouse.com
713-992-5762

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: Dale Braun <dale.k.braun@uwrf.edu>
Subject: Heath Mohawk problem
Message-ID: <s1d00e69.034@adngate.adn.uwrf.edu>

My Heathkit Mohawk receiver seems to have a
lot of distortion on CW/SSB. It uses a product
detector and only sounds good when I reduce
the RF and/or IF gain below the AVC threshold.
Now, is my problem in the AVC or in the
product detector? I get less audio distortion
when I turn the AVC off than when it is on. Can
anyone point me in the right direction?
Otherwise, its a pretty good receiver. Real

sensitive and very selective.

Thanks for the help.

73,

Dale

WD9GWH

Dale.K.Braun@uwrf.edu

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996

From: heikud@directcon.net (Dennis Heikura)

Subject: HW-32 Help

Message-ID: <199606251801.LAA08079@zeus.directcon.net>

I have been working on a HW 32 for about a week now and it's driving me crazy. A few seconds after you turn it on, (ptt position), the TR relay closes and get this, if you remove the mic amp tube, V1, it does not. It doesn't care whether the vox amp tube, V10, is installed or not. It a nutshell, the NE2 neon bulb that connects the plate of V10 and the grid of V2 fires as soon as power is applied causing the relay tube V2 to conduct. The only way it works in the PTT position is to disconnect said neon, then, when you ground the PTT line it works like it supposed to. Have tried just about everything, isolating branches etc. to no avail so far. Has anyone run into this before.

It's probably something simple that i'm overlooking. Anyway, I don't want to bore you but any help would be appreciated.

73 Denny WB7EGG

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996

From: dfrancis@usa.net (Dexter Francis)

Subject: It's SOUP! (Tube inventory update)

Message-ID: <v01520d02adf4ceefdef4@[192.156.196.140]>

Well, after a week of thrashing and mashing (shelves, NOT tubes!) I've gotten the inventory to the point where I *THINK* I can find most of it. With over 41000 entries in the database *plus* 64 cu ft. of un-inventoried tubes, I hope I can handle it all. Many thanks for the ongoing words of support and patience. There is no way I'm going to post a list, as that would take up too much room AND violate the spirit of the mail-list, but if anyone has been waiting to make a request, now's the time to ask, so we can transact one-on-one.

I'd also love to get a list of the tubes in your favorite BA's. I have the Collins Guide, and plan to stock all the tubes listed there, but a similar list of Halli, Hammar, Drake, etc. would be a good place to build from, as I try and balance the inventory. I'd even consider keeping a stock of tubes needed for your test equipment, just let me know what y'all might need.

-df

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Looking for a TUBE!
Message-ID: <Pine.SUN.3.91.960625133156.849C-100000@indy2>

Hi!

I'm looking for a tube for a (non-BA, alas!) low-power TV transmitter and thought *maybe* someone would have one. It's a YL1057, a ceramic power tetrode of a few hundred Watts plate dissipation. There a PL1057 in the rig now (Penta Labs number), but it is fading fast and the nun that runs the LPTV hasn't got much of a budget.

73,
--Bobbi

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: "Greg Anders" <anders@autopsy.corp.sgi.com>
Subject: Low Plate Current readings on Valiant?
Message-ID: <9606250957.ZM10978@autopsy.corp.sgi.com>

Several local hams have made me aware of a "traditional" problem with the Johnson Valiant and I'm trying to find out more information.

Apparently there is a shunt in the HV power supply circuit which is used to measure plate current. This shunt with age changes value resulting in plate current readings that are higher than actual. The accompanying indication is one of reduced final efficiency as actual watts out are low for calculated input power (using the erroneous Ip readings).

Does anyone have a recommended fix for this problem? My Valiant appears to be suffering from a mild form of this problem.

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: May you all have fair winds and following seas.....
Message-ID: <9606251913.AA100982@csemail.cropsci.ncsu.edu>

Due to circumstances from the bean counters and taskmasters at higher
eschelons, I find that I must pull the e-plug here at the grist mill.
As of gohome time today, I must unsubscribe from the BA and GB lists.

It is with a great fondness and remembrance that I will carry with me for
a long time to come, a small treasure amongst the trials and tribulations
of life, the gentle discourse and interaction with all my fellow friends
amongst the Boatanchorites and Glowbuggites over these past several years.

Much fine wisdom have I learned from all of you, on many and varied
topics concerning our beloved iron trove and breadboard treasures.
Although I have tried to contribute as I may, and not keep the bandwidth
too broad, perhaps there have been a few tid-bits of wisdom that I have
passed back in kind.

Until I find a home-bound internet provider, I will be plying the waters
afar into the ether, and will gladly look forward to your fine T8 signals
upon the gentle ethers on the BA/GB QRG of 3579R545 and 7050, as time may
permit, at the appointed hours of 0100/0200 UTC.

With warmest regards, best wishes, and a touch o' de' ol' salty dawg, I
remain, most respectfully yours.....

Boatanchor Bob, the ol' CW Pfarte.....
rdkeys@csemail.cropsci.ncsu.edu

73/ZUT VA DE NA4G/Bob

* Morse has been in the family for over 100 years. *
* Morse radiotelegraphy (Spark/CW) has been in the family since 1914. *

* May you have fair winds and following seas on your watch at the key. *

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>

Subject: Re: May you all have fair winds and following seas.....
Message-ID: <199606251943.0AA01138@dlep1.itg.ti.com>

At 01:49 PM 6/25/96 -0500, you wrote:

>Due to circumstances from the bean counters and taskmasters at higher
>eschelons, I find that I must pull the e-plug here at the grist mill.
>As of gohome time today, I must unsubscribe from the BA and GB lists.
>...
>Until I find a home-bound internet provider...

Bob,

Pick up one of those free America-On-Line disks you've got lying around.
That'll give you a month of e-mail for free, while you're searching for a
decent provider. I had to do this a while back when I lost access
temporarily at work. The e-mail system on AOL is really pretty nice. You
compose and read off-line so connect charges are nil.

Regards,
Bill Sorsby, N5BU

bill.sorsby@dlep1.itg.ti.com
Views expressed herein are no one's fault but mine.

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: Steve Ellington <n4lq@iglou.com>
Subject: Re: May you all have fair winds and following seas.....
Message-ID: <Pine.GS0.3.93.960625161928.28992B-100000@iglou>

Sorry Bob. This is not allowed. You are too deep into this thing. You will
not be allowed to quit! You know too much. Even as we speak, the
pug-uglies are preparing the Woofhong. Gird yourself up and join the
AOL'ites before it's too late.

Steve Ellington N4LQ@IGLOU.COM Louisville, Ky

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996

From: jproc@worldlinx.com
Subject: MF/DF Receiver
Message-ID: <Chameleon.4.01.2.960625003710.jproc@>

Dear BA'ers,

After what started as a very frustrating Saturday, the Marconi FM12 MF/DF receiver aboard the ship was made operational. Unfortunately, I had to leave a little early, so it was my partner who got the pleasure of hearing the first sounds coming from the speaker. The unit was built in 1943 and who knows how many years it sat idle. I could just picture this set somewhere in the North Atlantic in 1944 and an operator trying to get a bearing on a transmission from a 'U' boat. This is one BA that really gives you a feeling of the past. Ruggedness is the most impressive (read as back breaking) attribute of the set. It should be, since the 'critter' weighs in at 211 pounds. The five section turret containing all of the RF coils is about the size of a gallon paint can and a 5 inch wide handle provides plenty of leverage to rotate it.

In 1962, during Haida's second last year of service, the FM12 was relocated from Radio 1 to Radio 4 (electronic warfare) during a refit. Very ironically the same thing had to be done 31 years later but for different reasons. Moving the FM12 from Radio 1 to Radio 4 in 1993 required four of us to get it into its final position. I could swear that it weighs closer to 300 pounds and there is nothing that's easily removable to lighten the load.

There were two missing tubes (6V6 audio o/p and an NR78 BFO), one wrong tube installed (6K7 instead of 6K8) and one NR64 RF amp was bad. Two of the contact springs which engage the coil turret (similar to the one in the SP600) were bent and had to be carefully straightened out. After all that I said, 'what else could be wrong' and we discover that one of the two loop antennas is open #0%*&!. I guess that problem will have to be left for another Saturday. To add to the fun, the proper manual wasn't available, only some information sheets and a rudimentary schematic. Previous information which I received from fellow BA members sure helped me in the tube substitution department. Without that, it would have been a show stopper.

I'm not sure of how many of you have had experience with radio direction finding receivers, but I do have two questions:

1) The receiver appears to be a superheterodyne design but there are NO fixed IF transformers. The stages are labelled 1st RF, 2nd RF, 3rd RF, Det and A/F. This, on its own, would imply a TRF set, however the presence of a 6K8 triode/hexode converter sways me back to the superhet. It seems that every coil and capacitor that is required for the RF path is mounted in the turret. The unit tunes 42 khz to 1060 Khz in 5 bands. Is it conceivable that there may be a different IF frequency for each band? If the designers

had incorporated a fixed IF, they could have reduced the size of the turret, however, there would have been a gap in the frequency coverage to accomodate the IF frequency. Any ideas on this?

2) The over all fidelity of the receiver is poor and is evidenced when tuning in BCB stations. In RDF receivers, is the passband intentionally made narrower in order to improve selectivity?

This will sure be one great BA to play with once I can figure out how to use it effectively.

Regards,

~~~~~  
Jerry Proc VE3FAB  
E-mail: jproc@worldlinux.com  
Radio Restoration Volunteer  
HMCS Haida, Toronto Ontario  
~~~~~

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: NA4G on the fandeck? Initial Heat Bomb Report
Message-ID: <9606251547.AA100587@csemail.cropsci.ncsu.edu>

> >>Anyone worked Bob on his FD expedition yet? I've been listening
> *****
> No sighting of Boatanchor Bob on this end either..I've been
> searching all the stated freqs on 80 and 40 and then some..
> QRM from high power stations up north really squash things..

Initial field day bomb report from the BB55.....(:+{}{.....

We arrived fine at about noon and began setup.
We had the RAK/RAL, RAO, RBC, and TCM set up in one part of the display as operational gear. Then static display were the TBW, RBM's, TCS, Gibson Girl, RU/GF, ARC-5 and LM gear. Display info sheets were set out. Temperature on the fantail was in excess of 100F at 95% humidity...(:+{}{.....
Setup was completed about 5 pm and then thunderstorms rolled up...(:+{}{.....
Everything had to be covered over with tarps and plastic and shut down.
At 212330Z, it was clear enough to uncover the display and start again.
At 212350, we fired up the TCM.
TCM was dead....(:+{}{.....
After 15 minutes of poking and testing and pulling tubes, we ascertained the oscillator was weak and giving no output and replaced the oscillator.

At 22016 we sent the message on 7050kcs.

Noone came back to us and we were beginning to think we were seriously out on a big limb with a chainsaw.... wondering why us?

At 220130 we finally shut down and crashed.

At 221200 we arrived back on the fantail.

Fired up the TCM and had a great morning working several boatanchorites.

Conard/WS4S was on a hilltop in Tennessee with his TCS sounding GREAT!

Bob(?) down in Atlanta sounded ``too modern'' on his Viking II. It had grid block keying mods according to him, but it was excellent on CW.

Everyone we worked gave us a 589/599 report from the TCM.

At 221730 the contest station informed us that we were seriously keyclicking across all bands and would have to come to some sort of arrangement to keep out of their contest operation of field day. Since they were running a Kenwood, my interpretation was that it was overloading and they should try learning how to operate it properly or get a front end filter or a new rig. Alas, since we were the demo station, we threw in the towel and went back to display mode and snuk in a QRP rig at 5 watts(:+)).....

We made a dozen or so immediate contacts at the start of FD in QRP battery and then folded for the static demo, passing messages and giving guided tours back into boatanchordom. The public LOVED IT! The crew aboard ship LOVED IT. We took a dozen or so messages and passed them and then that was that.

At 230200 we closed the display for the night and went over to the contest station and rattled 'n banged on 40 CW for a couple of hours and then crashed for the night.

At 231230 we arrived back on the fantail.

A few /bb55 contacts were made on 30 meters. (I should have thought of this ahead of time and had everyone meet on 30 meters for the BA fun --- stupid me. 30 meters was great --- clear as a bell and little QRM/QRN.)

More public. All told, we must have had maybe 3000-4000 visitors drop by the display. Most seemed to like it. Some were hams. Some were original crew aboard the ship. Some were on other ships. A number of VIP visitors showed up, and even a contingent of dress gyrines for a full dress formal dinner in the officers mess hall aboard ship up after the public went off the ship Saturday night.

At 231800, FD ended and we sent a final signoff message.

The next six hours were spent packing up. Ol' BA Bob folded over once due to heat prostration and some kind lady passing by gave us a bottle of ice water that was poured all over him. A couple of the maintenance members of the crew aboard ship helped us get the TCM's and big receivers down the gangplank. We could have never done it without their help in that heat. Kudos to them.

So, all in all it was a great bit of Boatanchor PR and static display. The operational end of it was so-so. We sent messages late, and only got a few QSO's in, but we did make the rendezvous with some of the Boatanchorage folks running their Boatanchor gear!

Would we do it again? Damn right! (at least as soon as we recover from the sunburn and heat prostration....I still can't lift an RAL without gasping, two days after the fact...(:+{{.....).

Things to ammend on a second voyage.....

- 1). Start EARLIER. Two vanloads of boatanchors is a LOT to move and set up anywhere. Maybe hire a squad of grunts to do the moving.
- 2). Buy a set of bandpass filters for those damn kenicoyasawhooies that don't have any front end tuned circuits!!!!!! Maybe teach the folks what RF gain controls are for in CW operation?

73/ZUT DE NA4G/Bob

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: Greg Carter <kx4r@mindspring.com>
Subject: Need Info: UTC PA-428
Message-ID: <199606251639.MAA06421@borg.mindspring.com>

Howdy Gang !
I'm in need of info on the above UTC power transformer.
Anyone out there have an old catalog they could consult ??
Thanks much !
73, Greg KX4R
kx4r@mindspring.com

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: "Rhett T. George" <rtg@ee.duke.edu>
Subject: Plate current meters
Message-ID: <9606251940.AA27875@feller>

- Greetings -

Greg has asked about a metering difficulty - where the meter shunt ages and yields incorrect readings. If the shunt ages to a higher value, then the same current puts more voltage across the shunt and the meter. Result: a higher meter reading.

I have calibrated several meters against known good ones. Start with a voltage supply and current limiting resistor so as not to damage the known good one. The circuit will be a major series circuit with a minor parallel at the meter/shunt being calibrated. In series we have the d-c supply (just a few volts, if you please), the current limiting resistor, the known good (reference) meter, and the meter/shunt being calibrated. Usually I choose to calibrate at full-scale, sometimes at the usual operating point.

Turn on the power supply with it preset to 0 V. Advance the voltage until the good meter reads the desired value. Bring down the reading on the meter being calibrated by adding high valued resistors in parallel with the shunt. Add these at the shunt, not at the meter. Stop when the reading is correct. Shut the supply down and return the newly calibrated meter to normal amateur service.

Hope this helps.

73

Rhett george - KE4HIH

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996

From: Jay Coward <jayc@hpmsd2.sj.hp.com>

Subject: R666C/ARN-32

Message-ID: <9606252101.AA06372@hpmsd2.sj.hp.com>

Greetings to all,

A couple of digests back, someone mentioned going to RA Enterprises so naturally my curiosity was peaked. I'd been there a couple of years ago when they had the deal on PP-1104 power supplies but they are far more "organized" now. Saw lots of interesting stuff but not much that I "needed". I did find one little item for \$3 that got me though and it's a navigation receiver called R666C/ARN-32. I thought it might contain only sand because of its small size, 7 1/2 x 5 1/8 x 2 1/8. However it has 9 tubes with #'s like 5907, 5908, 5903. It's got a relay and a 1/4" phone jack on the chassis labeled 'audio test'. The input is in the VHF range and it has a BNC for the RF in and a 5 pin power input plug.

Does anyone have any info on this little gem? I would like to put power to it and find out what frequency it's on. It's fixed tuned and there is a crystal marked 34.05000.

73 and thanks in advance, Jay KE6PPF

--

NOTIFY PILOT BEFORE UNLOCKING AUTOTUNE

HEWLETT John Jay Coward 39201 Cherry Street MS NK10
PACKARD jayc@hpmsd2.sj.hp.com Newark, California 94560
Communications Components Division 510-505-5614 Fax 510-505-5560

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: Matt Jodziewicz <mattj@oraus.com>
Subject: RCA R978/GKA-5
Message-ID: <01BB6289.96A5A3E0@mattj.oraus.com>

FWIW I saw some items this past weekend while scrounging around in C&H =
Surplus in Pasadena that some might find interesting:

A rack mount RCA R978/GKA-5 which appears to be a receiver for 200 to =
400 MHz. The unit appeared to be relatively complete with no missing =
knobs, or obviously missing components. The asked for price was \$100

Second they have a number of those less than quarter inch (.218??) plugs =
that fit into the collins equipment apparently new, in sealed plastic =
with the military designations on the bag. These are already wired and =
are complete with a red cloth three conductor wire (about 5 feet long I =
think) having spade connectors on the free end. They had a number of =
them in a side bin for \$1.95 each. I bought two and they fit the =
collins plug perfectly. The red cloth wire is brand new (only 20, 30 =
years old) and looks great!

Last, they also had a Heathkit Qmultiplier for about \$40 if anyone needs =
one. It also appeared to be complete and in good shape. I don't know =
if any of these are working but can only report on the eyeball =
inspection.

If anybody needs any more information on these or knows what a =
R978/GKA-5 is, email me direct and I'll try and help.

Matt WB2VZS

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: RF Gain and CW
Message-ID: <9606251719.AA100799@csemail.cropsci.ncsu.edu>

>
> >2). Buy a set of bandpass filters for those damn kenicoyasawhooies
> > that don't have any front end tuned circuits!!!!!! Maybe teach
> > the folks what RF gain controls are for in CW operation?

> >
> >73/ZUT DE NA4G/Bob
> >
> >
> Just a quick question about the functions of an RF gain control during CW.
> >Maybe teach
> >> me what RF gain controls are for in CW operation?
>
> Thanks, Henry

Basically, on CW, one needs to follow the old school and run the audio up and the RF gain down. That keeps front ends (or lacks thereof happier).

It has been my experience over the past 15 or so years that most ops don't remember to turn the audio up until background noise is just audible and run the RF as the gain control on CW. It makes a difference on crowded bands, especially with kenicoyawhooies. It seems noone has taught such folks how to operate cw on their ricenboxen. Thus, they complain like hell, every field day and wonder why, when they think they are being interfered with.

On field day, it can make the difference between hearing a weak station and not hearing it. The front ends on most average kenicoyawhooies are quite hot, and have no tuned circuits. Thus, anything in the passband of the frontend (which, because of nil tuned circuits is very wide) will kill the avc and your weak signals drop into the mud. VHF folks want to call that desensitizing the thing.

Traditional real boatanchors all have RF gain controls, that were designed to be used and not played with as an afterthought. Things like the RAL, the RBC and many naval receivers with two or more sets of tuned circuits in the RF stanges, just don't seem to have that problem.

Case in point..... When we set up the QRP (latest ICOM 906? or whatever that little toy cb looking thing that covers all possible frequencies is) station, it also had some overload problems in the front end department when listening into the local contest half of the FD operation. It basically could pick up intermod of some sort all over the same band the other station was operating on. The RBC with its real tuned front end spat in its face and kept on truckin! I could copy a signal 5 khz off the contest station that was mud in the icom.

Something to be said for real tuned circuits in your radio and a real RF gain on CW.

73/ZUT DE NA4G/Bob

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: "D.D. Todd" <dube3@n-link.com>
Subject: Re: RF Gain and CW
Message-ID: <31D05F57.52F8@n-link.com>

rdkeys@csemail.cropsci.ncsu.edu wrote:

>
> Something to be said for real tuned circuits in your radio and a real
> RF gain on CW.
>

Real tuned circuits and real RF gain controls = real increase in cost and size. In today's push for smaller products and bigger profits, those things get in the way. Manufacturers aren't deaf, and they have heard the no code crowd at 20+ over 9. Why bother with that CW stuff? Newer Hams who (a) never work HF and (b) have never worked with receivers with RF tuned circuits will never know the difference anyway.

This is not a no-code slam, and please don't start another flap over it; it's just a statement of the manufacturer's viewpoint.

--

73,
Dube Todd AB5AP dube3@n-link.com

If we had to tolerate in others all that we permit in ourselves, life would be completely unbearable.

- Georges Courtelline

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: "Sandy, W5TVW" <70401.134@CompuServe.COM>
Subject: Re: RF Gain and CW
Message-ID: <960625203002_70401.134_IHD74-1@CompuServe.COM>

RE: Tuning CW and SSB on "BA" receivers

Most "modern" rigs that were engineered for SSB radiotelephone, contain a 'product detector' which has a very large dynamic range. Most of the BA receivers use a simple diode detector which works just fine for AM radiotelephone. For CW operation the AVC/AGC is generally disabled, whereupon the RF gain or sensitivity control is the only means of regulating the gain of the receiver.

The technique to receive CW on a BA set with a crystal or mechanical filter is as follows:

- 1.) Turn the RF gain to about 1/2 to 3/4 open, turn the audio gain up to near full on.
- 2.) Turn off the AVC or switch to MVC operation.
- 3.) Turn BFO on and center the pitch control.
- 4.) Turn the crystal filter selectivity to a setting that is around 2/3 to 3/4 of minimum bandwidth. Set "Phasing" to midscale.
(Mechanical filter users select sharpest filter.)
- 5.) Tune in a steady carrier or calibrator signal for loudest signal. Adjust the RF gain to prevent overloading, adjust BFO pitch for about a 500-800 hz. note. Repeat until signal is centered in passband.
- 6.) Now adjust BFO pitch for most pleasing tone to your ears!
- 7.) Look for a weaker signal at the same audio frequency on the other side of "zero beat". Now adjust the "Phasing" control to null this signal out as well as possible.
- 8.) Now adjust the RF gain so that normal signals can be heard comfortably. If advance too far, the receiver will start overloading or blocking. If set too low, you won't be able to hear anything but the strongest signals on the band. A little practice is in order here before you use that BA to go DX hunting! If the receiver is too sharp, open up the selectivity window by switching to a lower numbered crystal filter position (National, Hammerlund) or a broader xtal filter setting (Hallicrafters).

As you tune, you will notice the signal appears very weakly or not at all on one side of zero beat and loudly on the other side. This is correct "Single signal" operation. If you want to switch to the other side of zero beat (the other sideband) go back to step 6 and set the BFO pitch to the other side of the passband, and go thru the "phasing" nulling operation again.

Receiving SSB phone is pretty much the same except in this case, tune in the SSB station with the BFO off, and the crystal filter in 'mid' selectivity (mechanical filter users try a 2 or 3 khz filter). Tune to get the SSB "mush" in the center of the passband. Now turn on the BFO and adjust the pitch for an intelligible signal. You will have to "jockey" the RF gain control in a roundtable when there are strong and weak stations. You may find at one setting, the 'weakies' are too weak and the strong stations are garbled or starting to garble. This is why they came out with "product detectors"! Note the BFO pitch setting for upper and lower sideband for future reference and ease in setting things back up again. You have to be patient with a BA on SSB, especially if you are used to sand state transceivers, but if you persist, you'll get the "hang" of it and it becomes second nature. You'll also have to ride the RF gain control and sometimes the tuning on a 'drifty' receiver! The "phasing" control can be used as a "notch" to filter out carriers or minimize adjacent channel "monkey chatter".

With patience you can even tune in SSB on a one tube regenerative receiver! It takes practice!

Let me know how this works for you. In the meantime, I'm trying to figure out how to install a product detector 'add-on' to my Heathkit HR-10B (without spoiling it's value!) which is an awfully good receiver for what's in it, but it's a pain in the a-- to use on SSB!

73,

Sandy W5TVW

Boat Anchors collected, restored, modified, traded and used!

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: "William L. Fuqua III" <wlfuqu00@service1.uky.edu>
Subject: Re: RF Gain and CW
Message-ID: <199606252041.QAA14328@service1.cc.uky.edu>

No one has said anything about why you turn up the AF gain and turn down the RF. The old radios did not have a product detector and the BFO was sent directly to the AM detector (diode). This had two effects. The first was the AGC voltage was driven off scale so you had to disable the AGC and control the RF gain yourself.

The second effect is a bit more complicated. I could get into the mathematical details but they are a bit boring and hard to express in e-mail, however, the AM detector needed to act as a mixer to produce a beat frequency and not as an AM detector. To do this the BFO voltage to the diode detector had to be much greater than the IF signal to it. If not, you will get a hiss (just like you get with the BFO off) and some beat note and not a good clean tone.

73

Bill ko4ww

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996
From: "D.D. Todd" <dube3@n-link.com>
Subject: Re: Wafer switch revisited

Message-ID: <31D03D49.411D@n-link.com>

MODSTEPH@ACS.EKU.EDU wrote:

>

> Interesting phenomenon: I glued each piece exactly into its
> break line where each fit exactly... until I got to the last glue
> job of essentially putting two halves together - to find that for
> some reason the sum of the parts came out greater than the original
> whole...

You forget that the thickness of the glue you used between the pieces add to its size. Even a very thin layer of glue will make it larger than it originally was.

--

73,

Dube Todd AB5AP dube3@n-link.com

If we had to tolerate in others all that we permit in ourselves, life would be completely unbearable.

- Georges Courtelline

From boatanchors@theporch.com Tue Jun 25 16:40:43 1996

From: Michael Crestohl <mc@shore.net>

Subject: Re: Wanted R-1051 Manual

Message-ID: <199606250908.FAA10959@northshore.shore.net>

I don't think that NTIS sells Navy NAVSHIPS manuals.....but I know there;s an equivilent to NTIS that does. I think its in Philthadelphia!

If memory serves me well I recall that someone posted a horror story about his dealings with them.

73,

Michael Crestohl, KH6KD/W1

mc@shore.net